

Computer Science Seminar

Argument Mining Scientific Arguments: A Knowledge-Based Approach

Nancy Green
UNCG

Tuesday, February 19, 12:30-1:30
Petty 150

Abstract

This talk will describe a current project to automatically identify a scientist's arguments in biomedical/biological research articles. Towards this goal, we have identified a number of patterns of reasoning, called argument schemes, used by scientists in that field. We developed a prototype system that implements the argument schemes as rules in a logic programming language (Prolog). Given a partial semantic interpretation of a research article, the rules could be used to "mine" its arguments. The rules create a logic representation of the arguments that can be used for reasoning about relationships between arguments, such as when one argument refines or attacks the claim of another argument.



Speaker Information

Dr. Nancy Green is an Associate Professor of Computer Science at the University of North Carolina Greensboro. She received the M.A. in Linguistics from UNC Chapel Hill, the M.S. in Computer Science from the University of Pennsylvania, and the Ph.D. in Computer Science from the University of Delaware. She received a National Science Foundation Career Award for research on natural language generation of transparent argumentation. Her current research interests are in symbolic AI approaches to argument mining; educational argument modeling systems; argumentation in international studies; argumentation, rhetoric and ethics in science policy; and ethics of software engineering and AI.



UNC
GREENSBORO
Department of
Computer Science

Colloquium
Series